# YESHU AGARWAL

### **EDUCATION**

**Vellore Institute of Technology** 

**Bhopal, Madhya Pradesh** 

B.Tech- Computer Science and Engineering (Cloud Computing and Automation)

2023- Expected 2027

**CGPA: 8.66** 

#### **PROFESSIONAL SUMMARY**

I am a Computer Science undergraduate with a strong passion for building meaningful, creative, and scalable digital experiences. I enjoy crafting intuitive and visually engaging user interfaces that not only function well but feel great to use.

### **EXPERIENCE**

- Tech Co-Lead UX Club, VIT Bhopal (Jan 2024 Present)
  - Worked on planning and developing multiple web platforms for club events using React.js/Next.js, Tailwind CSS, and Framer Motion, and deployed them with Vercel.
  - The team developed a registration site having **2000+ unique viewers** with high conversion into successful student signups provided that UI and performance optimizations were made.
  - Worked with design and content teams in rendering the ideas with pixel-perfect details and pleasing animations.

## **TECHNICAL SKILLS**

- Front-End: HTML, CSS, Tailwind CSS, JavaScript, React.js (Vite), Three.js, React-Three Fiber, Next.js
- Web Animation & Designing: GSAP (with ScrollTrigger), Framer Motion, Lenis, Locomotive.js, Figma
- **Back-End:** Node.js, Express.js, REST APIs, MongoDB, Redis, Kafka, Mongoose, Prisma, JWT, OAuth, bcrypt, Multer, Rate Limiting, Socket.io, Zod (validations)
- System Design & Architecture: Load Balancing, Horizontal & Vertical Scaling, Caching (Redis), Event-Driven Architecture, Cloud-Native Design (AWS), Distributed Systems, Microservices, Messaging Queues (Kafka, SQS/SNS)
- Cloud: Docker, AWS (EC2, S3, CloudFront, API Gateway, SQS, SNS, Lambda, Route53, IAM Roles)
- Language: JavaScript, TypeScript, Java, C++, Object Oriented Programming (OOP)

## **PROJECTS**

- WhisperLink: (MERN-Full stack) -In Progress
  - Registered users can sign up and log in using JWT-based authentication. Session management is handled with secure
    HTTP-only cookies and local Storage. Anyone can ask questions without logging in—no accounts, no tracking.
  - o An anonymous Q&A platform using **Node.js and Express.js** as the backend runtime and API layer.
  - Link Lifecycle Management: Soft Delete: Links are flagged for deletion after a preset period. Hard Delete: A scheduled
    CRON job permanently removes expired links and associated data
  - o Integrated AES-256-CBC encryption for all messages (text), ensuring complete data privacy
  - Implemented audio messaging system using AWS S3 with pre-signed URLs, enabling frontend uploads without exposing credentials
- MoodY: (Backend)
  - o Build RESTful backend using **Node.js** and **Express.js** for a music mood detection platform
  - o Integrated Gemini API to analyze song lyrics and classify emotional tone.
  - Implemented custom user authentication using bcryptjs for password hashing and JWT for secure token-based access. For Database MongoDB.
  - o Structured **RESTful API** routes for user management, mood detection, and song retrieval.
  - o Handled error management, request validation, and middleware logic.
- <u>Portfolio-Web</u>:(Frontend)
  - o Designed and built a responsive personal portfolio using **React.js**, **Tailwind CSS**, **Framer Motion**, and **Lenis**.
  - o Implemented smooth scroll-based animations and dynamic UI transitions to enhance user experience.
  - o Focused on performance optimization, mobile responsiveness, and modern design aesthetics
- <u>Web-portfolio25</u>: (Frontend)
  - o Building a modern, fully responsive personal portfolio using Next.js, Tailwind CSS, Framer Motion, and Lenis.
  - Designed with a focus on smooth scroll interactions, animations, and clean layout for seamless UI/UX.
  - o Highlights projects, skills, and experience in a visually engaging format.
  - $\circ \quad \hbox{Optimized for performance, accessibility, and responsiveness across devices}.$

## **CERTIFICATIONS & ACTIVITIES**

- Programming with JavaScript authorized by Meta and offered through Coursera
- SIH 2024 Cleared internal university rounds and ranked among the top 50 teams preparing for the National Round.